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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/030,590	05/09/2002	Ulrich Gretzer	112740-389	2130
29177	7590	03/16/2006	EXAMINER	
BELL, BOYD & LLOYD, LLC			HOM, SHICK C	
P. O. BOX 1135			ART UNIT	
CHICAGO, IL 60690-1135			PAPER NUMBER	
			2666	

DATE MAILED: 03/16/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/030,590

Applicant(s)

GRETZER ET AL.

Examiner

Shick C. Hom

Art Unit

2666

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 5/9/02, 5/27/02.
2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 14-26 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 14,16,17,19,21 and 26 is/are rejected.
7) ☒ Claim(s) 15,18,20 and 22-25 is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Objections

1. Claims 15-20 and 22-26 are objected to because of the following informalities: In claims 15-20 lines 1-2 delete "A method for correcting a useful signal falsification in a receiver part of a telecommunication transmission system" and insert --- The method for correcting the useful signal falsification in the receiver part of the telecommunication transmission system--- because they're reciting the method, the useful signal falsification, the receiver part and the system of claim 14. Likewise, in claims 22-26 lines 1-2 delete "An apparatus for correcting a useful signal falsification in a receiver part of a telecommunication transmission system" and insert ---The apparatus for correcting the useful signal falsification in the receiver part of the telecommunication transmission system---. Appropriate correction is required.

Claim Rejections - 35 USC § 112

2. Claims 17 and 19 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Art Unit: 2666

In claim 17 line 5 which recite "the calculated average values" lack clear antecedent basis because no calculated average values have been previously recited in the claims and therefore the limitation is not clearly understood. Likewise, in claim 19 lines 3-4 which recite "the signal energy values" lack clear antecedent basis.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in

Art Unit: 2666

order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

4. Claims 14, 16, 21, and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Leneman et al. (6,430,724) in view of Boulter (3,846,583).

Regarding claims 14, 16, 21, and 26:

Laneman et al. disclose a method and device for correcting a useful signal falsification in a receiver part of a telecommunication transmission system, which operates according to one of a TDD method and a TDMA method, as a result of adjacent channel interference which generates a interference pulse in a useful channel, a composite signal thus formed of the useful signal and the interference pulse (see abstract and col. 2 lines 32-45 which recite processing received information to improve performance in the presence of interference, whereby the interference is associated with digital sidebands, the error being the presence of an adjacent interference signal within the frequency band including the technique of eliminating the interference whereby invention is applied to a time division multiplexed TDM frame format, respectively), the method

Art Unit: 2666

comprising the steps of: determining, in a first step, one of a starting point and an end point of the adjacent channel interference; and carrying out, in a second step, a correction using information relating to, respectively, one of the starting point and the end point (see 7 lines 22 to col. 8 line 11 which recite erasing the identified adjacent channel interference signal components including at different points in a given digital sideband clearly reads on determining one of a starting point and an end point of the adjacent channel interference and correction using information relating to the starting point and the end point as in claims 14, 21); and wherein the step of determining is effected via one of detector element and a detector circuit (see col. 5 line 56 to col. 6 line 9 which recite the use of a CRC error detecting block code which clearly anticipate a detector circuit as in claim 16).

Laneman et al. disclose all the subject matter of the claimed invention with the exception of whereby the generated interference pulse being a square wave and the step of carry out the correction using an offset as in claims 14 and 21; using frequency offset of the interference as in claim 16; and wherein the correction parts include an operational amplifier arrangement as in claim 26.

Art Unit: 2666

Boulter from the same or similar fields of endeavor teach that it is known to provide whereby the generated interference pulse being a square wave and the step of carry out the correction using a frequency offset of the interference (see col. 3 lines 11-55 which recite the use of square wave carrier and whereby the interference in the main signal being removed by the use of a phase shift); and wherein the correction parts include an operational amplifier arrangement (see col. 4 lines 10-49 which recite the use of the amplifier). Thus, it would have been obvious to the person having ordinary skill in the art at the time the invention was made to provide whereby the generated interference pulse being a square wave and the step of carry out the correction using an offset; and wherein the correction parts include an operational amplifier arrangement as taught by Boulter in the communications method and apparatus of Laneman et al. The interference pulse being a square wave and the step of carry out the correction using an offset; and wherein the correction parts include an operational amplifier arrangement can be implemented by connecting the phase shifter and amplifier arrangement of Boulter to the apparatus Laneman. The motivation for using the phase shifter and amplifier arrangement as taught by Boulter in the communication method and apparatus of Laneman et al. being that it provides more

Art Unit: 2666

efficiency and reliability for the method and apparatus since the phase shifter including the amplifier arrangement can better remove adjacent channel interference in a digital communication systems at the receiving end.

Allowable Subject Matter

5. Claims 15, 17-20, and 22-25 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, and objections set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.
Dowling et al. disclose adaptive multiple access interference suppression.
Dent et al. disclose duplex satellite communication using a single frequency or pair.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Shick C.

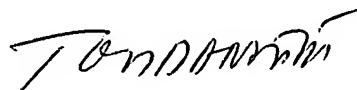
Art Unit: 2666

Hom whose telephone number is 571-272-3173. The examiner can normally be reached on Mon-Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Seema Rao can be reached on 571-272-3174. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

SH



DANGTON
PRIMARY EXAMINER